



STATE OF COLORADO

BUREAU OF MINES

## INSPECTOR'S REPORT

District No. FourRico ColoradoMay 17, 1937ST. LOUIS TUNNEL (on the Wellington property.)

Name of Mine, Quarry or Plant

Location 1 mile North of Rico, Colo. County of Dolores  
 (Nearest Post Office) Rico, Colo. Pioneer Mining District  
reached by auto

Owner St. Louis Smelting & Refining CompanyAddress 722 Chestnut Street, St. Louis, Missouri.

Operator (Owner or Lessee) St. Louis Smelting & Refining Company  
President, Fred M. Carter  
Secretary, J.A. Caselton

Address 722 Chestnut St., St. Louis, Missouri

Name of Agent, General Manager or other officer on whom to serve notices  
Duane M. Kline, Manager, Rico, Colorado

Name and address of local manager or person in direct charge of operations at mine, quarry or plant  
Duane M. Kline, Manager, Rico, Colo.

Character of ore or other products Silver, Lead, Copper, Zinc.Number employed underground 3 On surface -- Mill ---

Remarks COMPENSATION INSURANCE is carried.  
ACCIDENT REPORT BLANKS are on hand.

There is TELEPHONE.HAVE FIRST AID SUPPLIES.HAVE CHANGE ROOMS.SAFETY & SANITARY CONDITIONS, in general, are satisfactory.

DESCRIPTION OF MINE. The St. Louis Tunnel consists of a northeasterly cross-cut tunnel nearly 5000' in length, 7 ft. x 9 ft. in the clear. At a point 4300 ft. from the portal, a cross-cut was driven, 1000 ft. in a northwesterly direction and from the same point 900 ft. in a southeasterly direction. At a point 350 ft. further from this inter-

secting cross-cut, a raise is driven 180 ft. in height. Said raise will eventually extend to surface. Diamond drilling has been carried on extensively throughout the tunnel.

At a point in the tunnel about 4500 ft. from portal, a drift will be excavated a distance of 1500 ft. in a northeasterly direction.

At this point a raise will be driven to connect with the Mountain Springs Mine which opens to the surface. Length of this proposed raise is unavailable at present.

At this same 4500 ft. point a drift is driven 75 ft. southwest. This will be extended about 35 ft. further. No production at present.

SURFACE PLANT consists of a large Compressor House housing 2 Ingersoll Rand Air Compressors of different capacities, Machine Shop, Blacksmith Shop, Storage Rooms, etc., all under same roof. All this equipment is electrically driven.

They have a Locomotive Storage House, Timber Sheds, Dwelling House, small Office Building, Carbide Storage Building, and several other smaller buildings, all kept in good repair.

NO SHAFT.

UNDERGROUND HAULAGE is by trolley locomotive. Cars and track are in good condition.

TIMBERING. This tunnel is extensively timbered. In some parts the ground is very heavy and requires extra large timbers. Here timbers of Oregon Fir 12" x 14" are used and the sets are placed close together and are well installed. All timbering and other work is carried on in a workmanlike manner.

EXPLOSIVES. Magazine is over 800 ft. from nearest buildings. Its construction is fireproof, partly under surface, with sand filled walls. Very little powder is carried at this time. Caps and fuse are stored in another building a safe distance from magazine and other buildings. Carbide is stored in a separate building of its own.

ELECTRICITY. All motors, starting boxes and Switches are properly grounded and guarded. All electric lighting is well installed, insulated and guarded.

VENTILATION is mechanical, with outside electrically driven fan. Large flexible tubing is used instead of galvanized iron pipe. An inside booster will be installed later and will be electrically driven.

FIRE PROTECTION is both water and chemical. All surface buildings are spaced a safe distance apart and are built of wood covered with galvanized corrugated iron.

MISCELLANEOUS: This property is about to start operations and will employ about 25 men. There will be no production at present. For the past several years 3 men were employed continuously, retimbering where needed, cleaning water ditch and keeping track at proper grade. Everything throughout this tunnel is in first class condition. All surface buildings, etc., have been kept in first class repair. Everything is clean and orderly throughout.

Respectfully,

*D. C. McNaughton*

State Mine Inspect

District No. 4

in all other levels. All this equipment is in good condition.

**TIMBERING:** Considerable timbering is necessary in this mine, and is well installed.

All openings are well covered and guarded.

Ladders are well installed and in good condition.

**EXPLOSIVES** are safely stored in well built Magazines. Underground distributing magazines for daily supply of powder are kept under lock and key. Present powder regulations are fully observed. Caps are safely stored. Carbide is stored in a safe, dry place. Both electric and hand-fuse blasting is practiced.

**ELECTRICITY** is used at Lower (Blaine) Tunnel for power purposes and surface lighting. It is well installed, insulated, grounded and guarded. All stations underground are electrically lighted. They have telephone to the surface in all stations.

**FIRE PROTECTION** consists of high pressure water and chemical extinguishers.

**VENTILATION** is both natural and mechanical, with electrically-driven blowers.

**MISCELLANEOUS:** This property operated continuously throughout the year. The saw mill mentioned in this report goes a long way towards alleviating the difficulty of obtaining commercial lumber.

Everything is exceptionally clean and orderly about this property

The company co-operates fully with the Bureau of Mines and with the Inspector, and insists upon observance of safety rules and regulations.

Respectfully submitted

*L. C. McNaughton*

State Metal Mine Inspector, Dist. No. 4

STATE OF COLORADO  
BUREAU OF MINES  
INSPECTOR'S REPORT

District No. Four

Rico Colorado

May 12, 1938

ST. LOUIS TUNNEL ( on the Wellington Property.)

Name of Mine, Quarry or Plant

Location 1 mile North of Rico, Colo. County of Dolores  
(Nearest Post Office) Rico, Colo. (Pioneer Mining District)  
reached by auto

Owner St. Louis Smelting & Refining Company

Address 722 Chestnut Street, St. Louis, Missouri.

Operator  
(Owner ~~or~~ Lessee) St. Louis Smelting & Refining Company  
Fred M. Carter, President,  
J.A. Caselton, Secretary

Address 722 Chestnut Street, St. Louis, Missouri.

Name of Agent, General Manager or other officer on whom to serve notices  
Duane M. Kline, Rico, Colorado

Name and address of local manager or person in direct charge of operations at mine, quarry or plant  
Duane M. Kline, Rico, Colorado

Character of ore or other products Silver, Lead, Copper, Zinc.

Number employed underground 33 On surface 18 ~~men~~ 1 Electrician  
part time.

Remarks COMPENSATION INSURANCE is carried.  
ACCIDENT REPORT BLANKS are on hand.

There is TELEPHONE.

HAVE FIRST AID SUPPLIES.

HAVE CHANGE ROOMS.

SAFETY & SANITARY CONDITIONS, in general, are satisfactory.

DESCRIPTION OF MINE. The St. Louis Tunnel consists of a Northeasterly cross-cut tunnel nearly 5000 ft. in length 7 ft. x 9 ft. in the clear.

At a point 4300 ft. from the portal a cross cut was driven 1000 ft. in a Northwesterly direction, and from the same point a 900 ft. cross-cut in a Southeasterly direction. At a point 350 ft. further from

this intersecting cross-cut a raise is driven 180 ft. in height.

This mine resumed active operations May 15, 1937. Work since that time consisted of drifting Northwesterly 1020 feet from the breast of the Northwesterly cross-cut. In this Northwesterly drift 8 short cross-cuts were excavated in different directions, of different lengths, to the amount of about 413 feet. In this Northwesterly drift, about 700 ft. from Northwest Cross-cut, a 575 foot inclined raise will connect the St. Louis Tunnel with the main level of the Iron Springs Group. 447 feet of this raise is completed to date, leaving approximately 125 ft. to go. There are three stations in this raise at various distances apart. Telephones in each station connect with main St. Louis Tunnel. Air hoists of sufficient capacity are used to hoist timbers, etc., to the different stations on a temporary skipway. This raise is 8 ft. x 18 ft, 3 compartment, consisting of ore chute, manway and skipway. Skip will be installed later. A prospect raise 52 ft. in height was excavated in this Northwest drift.

They also drifted Southeast 173 ft. from the breast of the Southeasterly cross-cut, and excavated a 174 ft. raise from this drift. This raise is 6 ft. x 10 ft., 2 compartment, consisting of ore chute and manway.

No production at present.

**SURFACE PLANT** consists of a large Compressor House housing 2 Ingersoll Rand Air Compressors of different capacities, Machine Shop, Blacksmith Shop, Storage Rooms, etc., all under same roof. All this equipment is electrically driven. The smaller compressor is in use at this time. They have a Locomotive Storage House, Timber Sheds, Dwelling House, small Office Building, Carbide Storage Building, and several other smaller buildings, all kept in good repair.

**NO SHAFT.**

**UNDERGROUND HAULAGE** is by 10 Ton Trolley Locomotive. Cars and Track are in good condition.

**TIMBERING:** This tunnel is extensively timbered. In some parts the ground is very heavy and requires extra large timbers. Here timbers of Oregon Fir 12" x 14" are used and the sets are placed close together and are well installed. All timbering and other work is carried on in a workmanlike manner. 12" x 12" sawed timbers are used in the various raises, lined with 4" plank. When the 575 ft. raise is completed, new ladders and landings will replace those used in driving the raise.

**EXPLOSIVES:** Surface Explosives Magazine is over 800 feet from nearest buildings. Its construction is fireproof, partly under surface, with sand filled walls. Caps and fuse are stored in another building at a safe distance from magazine and other buildings. Carbide is stored in a separate building of its own.

**ELECTRICITY:** All motors, starting boxes and switches are properly grounded and guarded. All electric lighting is well installed, insulated, and guarded.

**VENTILATION** is mechanical with outside, electrically driven fan, and inside electrically driven booster fan. Large flexible tubing is used instead of galvanized iron pipe.

STATE OF COLORADO  
BUREAU OF MINES  
INSPECTOR'S REPORT

District No. Four

Rico Colorado

April 14, 1932

ST. LOUIS TUNNEL (on the Wellington property.)

Name of Mine, Quarry or Plant

Location: 1 mile north of Rico, Colorado County of Dolores  
(Nearest Post Office) Rico, Colo. Pioneer Mining District  
reached by auto

Owner St. Louis Smelting & Refining Company

Address 722 Chestnut Street, St. Louis, Missouri

Operator  
(Owner or Lessee) St. Louis Smelting & Refining Company  
Fred M. Carter, President  
J.A. Caselton, Secretary

Address 722 Chestnut Street, St. Louis, Missouri

Name of Agent, General Manager or other officer on whom to serve notices  
Duane M. Kline, Rico, Colorado.

Name and address of local manager or person in direct charge of operations at mine, quarry or plant  
Duane M. Kline, Rico, Colorado

Character of ore or other products Silver, Lead, Copper, Zinc.

Number employed underground 30 On surface 15 Min I Electrician  
part time

COMPENSATION INSURANCE is carried.

Remarks ACCIDENT REPORT BLANKS are on hand.

HAVE TELEPHONE.

FIRST AID SUPPLIES are provided.

HAVE CHANGE ROOMS.

SAFETY & SANITARY CONDITIONS, in general, are satisfactory.

DESCRIPTION OF MINE: The ST. Louis Tunnel consists of a Northeasterly cross-cut tunnel nearly 5000 ft. in length, 7 ft. x 9 ft. in the clear. At a point 4300 ft. from portal is a Northwesterly cross-cut which was 1000 ft. in length at time of last report. This has been extended 1640 ft. further. Other operations since last report consist of a 2-com-

partme. prospect raise 70 ft. in height, driven from a point 65 ft. back from present breast. About 300 ft. back from present breast of Northwest Cross-cut a 3-compartment raise is driven 210 ft. in height. It is not operated. In this same Northwest Cross-cut, a drift 370 ft. in length has been driven in a westerly direction.

The Big Raise, known as the Mountain Springs Raise, mentioned in last report, has been completed and is about 600 ft. in height.

At a point in this raise, 500 ft. above Northwest Cross-cut, a drift has been driven 950 ft. in an Easterly direction. 60 ft. back from the present heading of this drift, a 2-compartment raise has been driven 75 ft. in height.

Also various prospect drifts have been driven in different directions to various lengths.

All the above raises are equipped with air hoists of sufficient capacity to raise timbers, etc. to various working places.

No production.

SURFACE PLANT consists of a large Compressor House housing 2 Ingersoll Rand Air Compressors of different capacities, Machine Shop, Blacksmith Shop, Storage Rooms, etc., all under same roof. All this equipment is electrically driven. The smaller compressor is in use at this time. They have a Locomotive Storage House, Timber Sheds, Dwelling House, small Office Building, Carbide Storage Building, and several other smaller buildings, all kept in good repair.

NO SHAFT.

UNDERGROUND HAULAGE is by 10 ton Trolley Locomotive. Cars and Track are in good condition.

TIMBERING: This tunnel is extensively timbered. In some parts the ground is very heavy and requires extra large timbers. Here timbers of Oregon Fir 12" x 14" are used and the sets placed close together and are well installed. All timbering and other work is carried on in a workmanlike manner. 12" x 12" sawed timbers are used in the various raises, lined with 4" plank. All ladders are in good condition, and well installed. Openings are well covered and guarded.

EXPLOSIVES: Surface Explosives Magazine is over 800 ft. from nearest buildings. Its construction is fire-proof, partly under surface, with sand filled walls. Caps and Fuse are stored in another building at a safe distance from magazine and other buildings. Carbide is stored in a separate building of its own.

ELECTRICITY: All motors, starting boxes and switches are properly grounded and guarded. All electric lighting is well installed, insulated and guarded.

VENTILATION is both natural and mechanical. The completion of the Mountain Springs 3 compartment Raise provides natural ventilation from main Northeast and Northwest Cross-cuts to levels above. Mechanical ventilation, as described in last report, is used from this point.

FIRE PROTECTION is both water and chemical. All surface buildings are spaced a safe distance apart and are built of wood covered with galvanized corrugated iron.

EXPLOSIVES are safely stored in well built magazines, complying with law, at Blaine Tunnel and at Black Hawk Tunnel.

CAPS are stored in a safe place.

Carbide is stored in a safe dry place.

Only one days supply of explosives is taken to the Argentine Tunnel and it is safely stored.

All these tunnels are equipped with electric Blasting Machines, and both electric and hand fuse blasting is done.

ELECTRICITY is used at Lower ( Blaine ) Tunnel only for power purposes.

FIRE PROTECTION at Blaine Tunnel consists of water and chemical extinguishers. Tunnel is equipped with Fire Door.

At Black Hawk Tunnel, fire protection is chemical extinguishers.

Buildings are located at a safe distance from mine operations. Tunnel is equipped with Fire Door.

No fire protection at Argentine Tunnel. Buildings are located legal distance from tunnel opening. Have Fire Door.

VENTILATION is natural and good, throughout.

MISCELLANEOUS: Development on this property since my 1937 report is very encouraging, as large bodies of profitable ore have been exposed in the various working places.

General Manager, C.T. Van Winkle, from Salt Lake City, was at the property, and says that this is the time to develop mines, in order to have large bodies of ore opened up and ready to ship when metal prices improve.

The Company plans to build a mill when the mine is far enough developed to determine mill capacity.

This company has recently acquired the Rico Consolidated Mines, which include 5 claims, and has also bought a 1/2 interest in 2 full claims from the Pellet Group. All these claims adjoin the Rico-Argentine properties.

The Company also owns a building in Rico, 40 ft. x 30 ft. which houses a large caterpillar tractor, and has living room in rear.

Everything is exceptionally clean and orderly about this property.

Respectfully submitted,

*D. C. McNaughton*

State Mine Inspector, District No. 4



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STATE OF COLORADO  
BUREAU OF MINES  
INSPECTOR'S REPORT

District No. Four

Rico

Colorado

November 16, 1940, 193

ST. LOUIS TUNNEL (on the Wellington Property.)

Name of Mine, Quarry or Plant

Location 1 mile north of Rico, Colo.

County of Dolores

(Nearest Post Office) Rico, Colo. (Pioneer Mining District)  
reached by auto

Owner St. Louis Smelting & Refining Company

Address 722 Chestnut Street, St. Louis, Mo.

Operator

(Owner ~~or Lessee~~) St. Louis Smelting & Refining Company

Fred M. Carter, President

J.A. Caselton, Secretary,

Address

722 Chestnut Street, St. Louis, Missouri.

Name of Agent, General Manager or other officer on whom to serve notices

Harry Kline, Rico, Colorado

Name and address of local manager or person in direct charge of operations at mine, quarry or plant

Harry Kline, Rico, Colorado

Character of ore or other products Silver, Lead, Copper, Zinc.

Number employed underground 16

On surface 2

Miscellaneous 1

2 shifts of 8 men each

Remarks

COMPENSATION INSURANCE is carried.

ACCIDENT REPORT BLANKS are on hand.

HAVE TELEPHONE.

FIRST AID SUPPLIES are provided.

HAVE CHANGE ROOMS.

SAFETY & SANITARY CONDITIONS, in general, are satisfactory.

DESCRIPTION OF MINE:—The St. Louis Tunnel consists of a northeasterly cross-cut tunnel nearly 5000 ft. in length, 7 ft. by 9 ft. in the clear. At a point 4300 ft. from the portal a drift extends 2640 ft. in <sup>n</sup>orthwes-  
(cross-cut and)

terly direction. At a point 65 ft. back from the breast of this north-west drift is a prospect raise 70 ft. in height, not operated. At a point 300 ft. back from the breast a 3 compartment raise extends 210 ft. in height, and is not operated. A drift 370 ft. in length extends from this northwesterly drift, in a westerly direction. It is caved and not operated.

From a point in this northwesterly drift, about 700 ft. from the northeast cross-cut, a 3 compartment inclined raise extends 600 ft. to the main level of the Mountain Springs Group.

There are various other raises not operated and various drifts of different lengths in different directions, not operated.

This property has been closed down for over a year. Operations resumed November 1st, this year. Preliminary work consisted of cleaning out tunnel and retimbering where necessary. They are now driving the main heading of the 5000 ft. cross-cut. They will drive a distance of approximately 50 ft. At that point they will excavate a 2-compartment raise 130 ft. in height and start drifting in a southeasterly direction. There are no operations on the upper levels, which are more or less caved.

The big 3 compartment raise 600 ft. in length, known as the Mountain Springs raise has not been explored as yet this year.. Some timbering will be necessary and some new ladders will be required.

There is no production.

**SURFACE PLANT:** A large Compressor House houses 2 Ingersoll Rand Compressors of different capacities, Machine Shop, Blacksmith Shop, Storage Rooms, etc., all under same roof. All this equipment is electrically driven. The smaller Compressor is in use at this time. They have a Locomotive Storage House, Timber Sheds, Dwelling House, small Office Building, Carbide Storage Building, and several other smaller buildings, all kept in good repair.

**NO SHAFT.**

**UNDERGROUND HAULAGE** is by 10-ton Trolley Locomotive. Cars and Track are in good condition.

**TIMBERING:** This tunnel is extensively timbered. In some parts the ground is very heavy and requires extra large timbers. Here timbers of Oregon Fir 12" x 14" are used and the sets placed close together and are well installed. All timbering and other work is carried on in a workmanlike manner. 12" x 12" sawed timbers are used in the various raises, lined with 4" plank. All ladders are in good condition and well installed. Openings are well covered and guarded.

**EXPLOSIVES:** Surface Explosives Magazine is over 800 ft. from nearest buildings. Its construction is fire-proof, partly under the surface, with sand filled walls. Caps and fuse are stored in another building at a safe distance from magazine and other buildings. Carbide is stored in a separate building of its own.

**ELECTRICITY:** All motors, starting boxes and switches are properly grounded and guarded. All electric lighting is well installed, insulated and guarded.

**VENTILATION** is both natural and mechanical. It is natural to the 3-compartment 600 ft. Mountain Springs Raise which opens to the surface. At this point mechanical ventilation is installed and will be used in

EXPLOSIVES are safely stored in well built magazines, complying with the law, at Blaine Tunnel and Black Hawk Tunnel.

CAPS are stored in a safe place.

CARBIDE is stored in a safe dry place.

Only one days supply of explosives is taken to the Argentine Tunnel and it is safely stored.

All these tunnels are equipped with Electric Blasting Machines, and both electric and hand fuse blasting is done.

ELECTRICITY is used at lower (Blaine) Tunnel ~~only~~ for power purposes, and surface lighting. It is well installed, insulated and guarded.

FIRE PROTECTION at Blaine Tunnel consists of water and chemical extinguishers. Tunnel is equipped with Fire Door.

At Black Hawk Tunnel, fire protection is chemical extinguishers.

Buildings are located at a safe distance from mine operations. Tunnel is equipped with Fire Door.

No fire protection at Argentine Tunnel. Buildings are located legal distance from tunnel opening. Have Fire Door.

VENTILATION is natural and good, throughout.

MISCELLANEOUS: This property operated continuously throughout the year. Large bodies of ore have been uncovered in the various working places.

Late in 1938 construction of a 150 Ton Mill was started and was completed early in 1939. This Mill has not been operated to date.

However they expect to start production about June 15th.

Construction of Tailings Disposal Pond necessitated the construction of 1500 ft. of flume and ditch to change the course of the creek, which is the main water supply of the town of Rico.

The Company owns a building in Rico, 40 ft. x 30 ft. which houses a large caterpillar tractor, and has living room in rear.

Everything is exceptionally clean and orderly about this property.

Respectfully submitted

*L. C. McNaughton*

State Mine Inspector, District No. 4

STATE OF COLORADO  
BUREAU OF MINES  
**INSPECTOR'S REPORT**

District No. Four

Rico, Colorado

May 22, 1934.

ST. LOUIS TUNNEL (on the Wellington Property.)  
Name of Mine, Quarry or Plant

Location 1 mile north of Rico, Colo. County of Dolores  
(Nearest Post Office) Rico, Colo. (Pioneer Mining District)  
Reached by auto

Owner St. Louis Smelting & Refining Company

Address 722 Chestnut Street, St. Louis, Mo.

Operator St. Louis Smelting & Refining Company  
(Owner or Lessee) Fred M. Carter, President

J. A. Caselton, Secretary.

Address 722 Chestnut Street, St. Louis, Missouri.

Name of Agent, General Manager or other officer on whom to serve notices  
Harry Kline, Rico, Colorado.

Name and address of local manager or person in direct charge of operations at mine, quarry or plant  
Harry Kline, Rico, Colorado.

Character of ore or other products Gold, Silver, Lead, Copper, Zinc.

Number employed underground 15 On surface 4 Mill        Miscellaneous 1

Remarks 2 shifts of 8 men each  
COMPENSATION INSURANCE is carried.  
ACCIDENT REPORT BLANKS are on hand.

HAVE TELEPHONE.

FIRST AID SUPPLIES ARE provided.

HAVE CHANGE ROOMS.

SAFETY & SANITARY CONDITIONS, in general, are satisfactory.

DESCRIPTION OF MINE:-The St. Louis Tunnel consists of a northeasterly cross-cut tunnel nearly 5000 ft. in length, 7 ft. by 9 ft. in the clear.

Since my 1940 report they have extended the main tunnel 45 feet and at this point they excavated a two compartment raise 150 ft. in height, consisting of manway and ore chute. At the top of this raise they drifted 200 ft. north, and 30 ft. east. At the end of the north drift they raised 22 ft. This raise is also two compartment, consisting of ore chute and manway. At the top of this raise they drifted 150 ft. north and some ore is mined on this level at present.

There are various other raises not operated and various drifts of different lengths in different directions, not operated.

The ore is found in beds or chimneys of various sizes. The ore is a sulphide carrying gold, silver, lead, copper and zinc.

The production is approximately 400 tons per month, shipped to the Utah Smelter.

They are operating two seven-hour shifts in the mine.

Stated value of ore is \$1500 per ton.

**SURFACE PLANT:** A large Compressor House houses 2 Ingersoll Rand Compressors of different capacities, Machine Shop, Blacksmith Shop, Storage Rooms, etc., all under same roof. All this equipment is electrically driven. The smaller Compressor is in use at this time. They have a Locomotive Storage House, Timber Sheds, Dwelling House, small Office Building, Carbide Storage Building, and several other smaller buildings, all kept in good repair.

**NO SHAFT.**

**UNDERGROUND HAULAGE** is by 10-ton Trolley Locomotive in St. Louis Tunnel. Cars and Track are in good condition. Wheel-barrows are used where they are mining ore.

**TIMBERING:** This tunnel is extensively timbered. In some parts the ground is very heavy and requires extra large timbers. Here timbers of Oregon Fir 12" x 14" are used and the sets placed close together and are well installed. All timbering and other work is carried on in a workmanlike manner. 12" x 12" sawed timbers are used in the various raises, lined with 4" plank. All ladders are in good condition and well installed. Openings are well covered and guarded.

**EXPLOSIVES:** Surface Explosives Magazine is over 800 ft. from nearest buildings. Its construction is fire-proof, partly under the surface, with sand filled walls. Caps and fuse are stored in another building at a safe distance from magazine and other buildings. Carbide is stored in a separate building of its own.

**ELECTRICITY:** All motors, starting boxes and switches are properly grounded and guarded. All electric lighting is well installed, insulated and guarded.

**VENTILATION** is both natural and mechanical. Mechanical equipment consists of electrically driven reversible blower, and large flexible tubing.

**FIRE PROTECTION** is both water and chemical extinguishers. All surface buildings are spaced a safe distance apart and are built of wood covered with galvanized corrugated iron.

**MISCELLANEOUS:** The 600 ft. raise mentioned in my 1940 report (which connects the main tunnel with the Mountain Springs Group) is a 3-compartment inclined raise. This raise is kept in good condition, both for ventilation and exit for men. They are also catching caves and retimbering on the Wellington Tunnel. This tunnel is located between the Mountain Springs Group and the

main St. Louis Tunnel.

This property operated continuously since they resumed on November 1, 1940.

Everything is clean and orderly in and about the property.

Respectfully submitted,

*D. C. McNaughton*

State Metal Mine Inspector, Dist. No. 4.

STATE OF COLORADO  
BUREAU OF MINES

INSPECTOR'S REPORT

District No. Four

Rico Colorado May 23, 19 46

ST. LOUIS TUNNEL (On the Wellington property of the St. Louis  
(Name of Mine, Quarry or Plant) Smelting & Refining Company's  
Group)

County Dolores

Pioneer Mining District

Location 1 mile north of Rico, Colo.

Rico, Colorado  
(Nearest Town)

Reached by auto

Owner Rico Argentine Mining Company

Address Dooley Block, Salt Lake City, Utah

Operator Rico Argentine Mining Company

Owner or Lessee

C.T. Van Winkle, Pres. & Gen. Mgr., Salt Lake City, Utah and Rico, Colo

Address J.C. Johnson, Vice-Pres., 151 First Ave., Salt Lake City, Utah

W.G. Seeley, Secretary, 132 Main St., Salt Lake City, Utah

Name and address of agent, general manager or other officer on whom to serve notices

C.T. Van Winkle, Gen. Manager, Salt Lake City, Utah and Rico, Colo.

Name and address of local manager or person in direct charge of operations

C. T. Van Winkle, Gen. Manager, Salt Lake City, Utah and Rico, Colo.

Name and address of company or person to whom notification of Annual Report should be sent

C. T. Van Winkle, Gen. Manager, Salt Lake City, Utah and Rico, Colo.

Character of ore or other products Gold, silver, copper, lead and zinc.

~~Producing~~

Not Producing

Number employed underground

and

On surface 4

Mill

Compensation insurance carried

~~Compensation not carried~~

Accident Report Blanks are on hand.

Remarks: Have Telephone.

First Aid Supplies are provided.

Have Change Rooms.

Safety and Sanitary Conditions, in general, are satisfactory.

DESCRIPTION OF MINE:- The St. Louis Tunnel consists of a northeasterly cross-cut tunnel approximately 5045 ft. in length, 7 ft. x 9 ft. in the clear. At a point 4300 ft. from the portal, a cross-cut and drift extends 3640 ft. in a northwesterly direction. From a point in this north-

westerly drift about 700 ft. from the northeasterly cross-cut, a 3-compartment Inclined Raise extends 600 ft. to the Main Level of the Mountain Springs Group, above.

Operations this year consisted of cleaning out and retimbering the St. Louis Tunnel. They are now advanced to a point 2500 ft. from the portal. Four men are employed in this work. There is no production.

**SURFACE PLANT:-** A large Compressor House houses electrically-driven Air Compressor, Machine Shop, Blacksmith Shop, Storage Rooms, etc., all under same roof. All this equipment is electrically driven. They have Timber Sheds, Dwelling House, small Office Building, Carbide Storage Building, and several other smaller buildings, all kept in fair repair. All surface buildings are spaced a safe distance apart, and are built of wood, covered with galvanized, corrugated iron.

**UNDERGROUND HAULAGE** is Battery Locomotive in St. Louis Tunnel. Cars and Track are in good condition.

**TIMBERING:-** All timbering now being installed is in first class condition.

**NO EXPLOSIVES** used at present. Carbide is stored in a safe dry place.

**ELECTRICITY** is well installed, insulated, grounded and guarded.

**VENTILATION** is mechanical, with electrically-driven Reversible Blower and tubing.

**FIRE PROTECTION** is both water and chemical extinguishers.

**MISCELLANEOUS:-** The Rico Argentine Company acquired the St. Louis Group in 1944. Cleaning out and retimbering operations started late in 1945 and have been continuous to date.

For more complete description of old workings, refer to my last reports of November 16, 1940 and May 22, 1941.

Everything is as clean and orderly as can be expected for this class of work.

Respectfully submitted,

*D. E. McNaughton*

State Metal Mine Inspector District No. 4



STATE OF COLORADO  
BUREAU OF MINES

INSPECTOR'S REPORT

District No. Four

Rico Colorado. August 13 19 47

ST. LOUIS TUNNEL (formerly part of the St. Louis Smelting & Refining  
(Name of Mine, Quarry or Plant) Company's Group)

County Dolores

Pioneer Mining District

Location 2 miles north of Rico, Colo.

Rico, Colo.

(Nearest Town)

Reached by auto

Owner Rico Argentine Mining Company

Address Dooley Block, Salt Lake City, Utah

Operator Rico Argentine Mining Company

Owner or Lessee

C.T. Van Winkle, Pres. & Gen. Mgr., Salt Lake City, Utah and Rico, Colo.

Address J.C. Johnson, Vice-Pres., 151 First Ave., Salt Lake City, Utah

W.G. Seeley, Secretary, 132 Main St., Salt Lake City, Utah.

Name and address of agent, general manager or other officer on whom to serve notices

C. T. Van Winkle, Gen. Manager, Salt Lake City, Utah, and Rico, Colo.

Name and address of local manager or person in direct charge of operations

C. T. Van Winkle, Gen. Manager, Salt Lake City, Utah and Rico, Colo.

Name and address of company or person to whom notification of Annual Report should be sent

C. T. Van Winkle, Gen. Mgr., Dooley Block, Salt Lake City, Utah and Rico, Colo.

Character of ore or other products gold, silver, copper, lead and zinc.

~~Producing~~

Not Producing

Number employed underground 6 On surface 1  
(up to May 1st, 1947)

~~Miscellaneous~~ 1

Compensation insurance carried

~~Compensation not carried~~

Accident Report Blanks are on hand.

Remarks: Have Telephone.

First Aid Supplies are provided. Have Change Rooms.

Safety and Sanitary Conditions, in general, are satisfactory.

DESCRIPTION OF MINE:- The St. Louis Tunnel consists of a northeasterly cross-cut tunnel approximately 5045 ft. in length, 7 ft. x 9 ft. in the clear. At a point 4300 ft. from the portal, a cross-cut and drift extends 3640 ft. in a northwesterly direction. From a point in this north-

westerly drift about 700 ft. from the northeasterly cross-cut, a 3-compartment Inclined Raise extends 600 ft. to the Main Level of the Mountain Springs Group above.

Operations this year up to May 1st consisted of cleaning up and retimbering of the St. Louis Tunnel beyond the 4300 ft. point, and cleaning out and retimbering the 3640 ft. northwesterly cross-cut and drift to the 600 ft. 3-compartment inclined raise connecting with the Mountain Springs Mine, above. This raise was also repaired and is in good condition. This raise is equipped with an electrically-driven single-drum Hoist, with 9/16" Cable and Skip. This equipment is located in Mountain Springs Level above and is not used at present.

The eight men employed on this property up to May 1st were transferred to the Mountain Springs Mine.

There was no production.

**SURFACE PLANT:-** The large Compressor House, Blacksmith Shop, etc., described in last report are not now used. Compressor, Battery Locomotive, Blower, etc., have been moved to Mountain Springs Mine.

**UNDERGROUND HAULAGE** was Battery Locomotive in St. Louis Tunnel. Cars and Track are in good condition.

**TIMBERING:-** All timbering is in first class condition.

**ELECTRICITY** was used for power and surface lighting. It is well installed, insulated, grounded and guarded.

**VENTILATION** was both natural and mechanical, with electrically-driven reversible blower and tubing.

**FIRE PROTECTION** was both water and chemical extinguishers.

**MISCELLANEOUS:-** This property formerly belonged to the St. Louis Smelting & Refining Company and is now a unit of the Rico Argentine Mines.

Operations ceased on this property May 1st, 1947.

Veins are fissures and beds, varying in width.

This St. Louis Tunnel is maintained in good condition.

Respectfully submitted,

*D. C. McNaughton*

State Metal Mine Inspector, District No. 4

which is 3-compartment, 280 feet in depth and connects No.3 Argentine Level with Blaine (No.1) Level. No.3 Shaft is equipped with single-drum electrically-driven Hoist with 3/4" Cable and Cage. All this equipment, fastenings, etc., is kept in good condition. All moving parts are covered and guarded.

UNDERGROUND HAULAGE is Battery Locomotive on main haulageway, man power on all other levels. All this equipment is in good condition.

TIMBERING:- Considerable timbering is necessary in this mine, and is well installed. All openings are well covered and guarded. Ladders are well installed and in good condition.

EXPLOSIVES:- Explosives are safely stored in well-built Magazines. Underground Distributing Magazines for daily supply of powder are kept in good condition. Caps are safely stored. Carbide is stored in a safe, dry place. Both electric and hand blasting is practiced.

ELECTRICITY is used for power and lighting both underground and surface. It is well installed, insulated, grounded and guarded.

They have telephone to the surface in all stations.

FIRE PROTECTION consists of high pressure water and chemical extinguishers. Fire Doors are provided.

VENTILATION is both natural and mechanical, with electrically-driven Blowers.

MISCELLANEOUS:- This property operated continuously throughout the year. They are now milling approximately 110 tons per 24 hour day in the Rico-Argentine Mill, making two products, one silver-lead, the other zinc.

Concentrates are trucked two miles to the R.G.S. Railroad, thence shipped by rail to smelters.

The Saw Mill mentioned in this report goes a long way toward alleviating the difficulty of obtaining commercial lumber.

The Rico Argentine Company maintains a Caterpillar Tractor, equipped with both Snow Plow and Dozer which they use for building and maintaining roads to all of their operating units.

Everything is exceptionally clean and orderly about this property.

The Company co-operates fully with the State Bureau of Mines and with the Inspector, and insists upon observation of safety rules and regulations.

Respectfully submitted

*O.C. McNaughton*

State Metal Mine Inspector, District No. 4

STATE OF COLORADO  
BUREAU OF MINES

INSPECTOR'S REPORT

District No. Four

Rico Colorado

April 9 19 48

ST. LOUIS TUNNEL

(Name of Mine, Quarry or Plant)

County Dolores

Pioneer Mining District

Location 2 miles north of Rico, Colorado

Rico, Colorado

(Nearest Town)

Reached by auto

Owner Rico Argentine Mining Company

Address Dooley Block, Salt Lake City, Utah.

Operator Rico Argentine Mining Company

Owner or Lessee

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Address J.C. Johnson, Vice-Pres., 151 First Ave., Salt Lake City. Colo.

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Name and address of agent, general manager or other officer on whom to serve notices

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Name and address of company or person to whom notification of Annual Report should be sent

C. T. Van Winkle, Gen. Mgr., Dooley Block, Salt Lake City, Utah & Rico, Colo.

Character of ore or other products

Producing

Not Producing

Number employed underground

On surface

Mill

Compensation insurance carried

Compensation not carried

Accident Report Blanks are on hand.

Remarks: Have Telephone.

First Aid Supplies are provided. Have Change Rooms.

Safety and Sanitary Conditions, in general, are satisfactory.

DESCRIPTION OF MINE:- The St. Louis Tunnel consists of a northeasterly cross-cut tunnel approximately 5045 ft. in length, 7 ft. x 9 ft. in the clear. At a point 4300 ft. from the portal, a cross-cut and drift extends 3640 ft. in a northwesterly direction. From a point in this north-

westerly drift, about 700 ft. from the northeasterly cross-cut, a 3-compartment Inclined Raise extends 600 ft. to the Main Level of the Mountain Springs Group, above. This raise is cribbed with 8 x 8 sawed timbers throughout, and equipped with an electrically-driven, single-drum Hoist, with 9/16" Cable and Skip. This equipment is located on Mountain Springs Level, above.

There are no operations in the St. Louis Mine at present - maintenance only. The tunnel and raise are used for ventilation of Mountain Springs Mine and exit for men, only.

**SURFACE PLANT:-** All surface and underground equipment which was formerly located at the St. Louis Mine is now used at Mountain Springs Mine.

**TIMBERING:-** Maintenance only.

**VENTILATION** is natural.

**MISCELLANEOUS:-** This property formerly belonged to the St. Louis Smelting & Refining Company, and is now a unit of the Rico Argentine Mines.

This tunnel is kept in good condition.

Respectfully submitted



State Metal Mine Inspector, District No. 4

**EXPLOSIVES:-** Explosives are safely stored in well-built Magazines. Underground Distributing Magazines for daily supply of powder are kept in good condition. Caps are safely stored. Carbide is stored in a safe, dry place. Both electric and hand blasting is practiced.

**ELECTRICITY** is used for power and lighting, both underground and surface. It is well installed, insulated, grounded and guarded.

They have telephone to the surface in all stations.

**FIRE PROTECTION** consists of high pressure water and chemical extinguishers. Fire Doors are provided.

**VENTILATION** is both natural and mechanical, with electrically-driven Blowers.

**MISCELLANEOUS:-** This property operated continuously throughout the year. They are now milling between 110 and 125 tons per 24 hour day in the Rico-Argentine Mill, making two products, one silver-lead, the other zinc. Concentrates are trucked two miles to the R.G.S. Railroad, thence shipped by rail to Smelters.

The Saw Mill mentioned in this report goes a long way toward alleviating the difficulty of obtaining commercial lumber.

The Rico-Argentine Company maintains a Caterpillar Tractor, equipped with both Snow Plow and Dozer which they use for building and maintaining roads to all of their operating units.

The Company is also repairing and constructing several residences in Rico for living quarters for employees' families.

Everything is exceptionally clean and orderly about this property.

The Company co-operates fully with the State Bureau of Mines and with the Inspector, and insists upon observance of safety rules and regulations.

Respectfully submitted,

*D. C. McNaughton*

State Metal Mine Inspector, District No. 4